## UPPER LAYER SECURITY BASED ON LOWER LAYER KEYING

## ABSTRACT OF THE DISCLOSURE

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A method (FIG. 4 – 6) of providing authentication services for applications running on a client (401, 501) and requiring access to a network based server (407, 507) where the method uses lower layer keying to provide upper layer security. The method is practiced in corresponding client (401-403) and network entities (407-409). The method comprises establishing a network connection including an authentication with the network (421); obtaining, responsive to the authentication, a dynamic seed (423, 425); generating an application key corresponding to the dynamic seed (427, 429); and providing the application key to facilitate authenticating an application (515-523, 527-535).